CA$HLINK II

CA$HLINK II and Financial Institutions
What to Expect!

Department of the Treasury
Financial Management Service

May 2000

CA$HLINK II

Overview

- CA$HLINK II Goal
- Customer User Group - Financial Institution Partnership
- Project Schedule (Work Packages I, II, and III)
- Changes in the New System
- Readiness
- Architecture
- Look / Feel Prototype Demonstration
- Business Security Risk Evaluation
- Performance Benchmark
- Communications
- The Road Ahead - What's Next for You?
- Contacts

CA$HLINK II Goal

To deliver a new Federal electronic cash concentration and information system that will meet the Federal Government's changing business needs and take full advantage of innovative technologies.

CA$HLINK II Will Be Adaptable and Expandable

Customer User Group - Financial Institution Partnership

To ensure early, frequent and ongoing lines of communication between Financial Institutions and the Financial Management Service's CA$HLINK II Team.

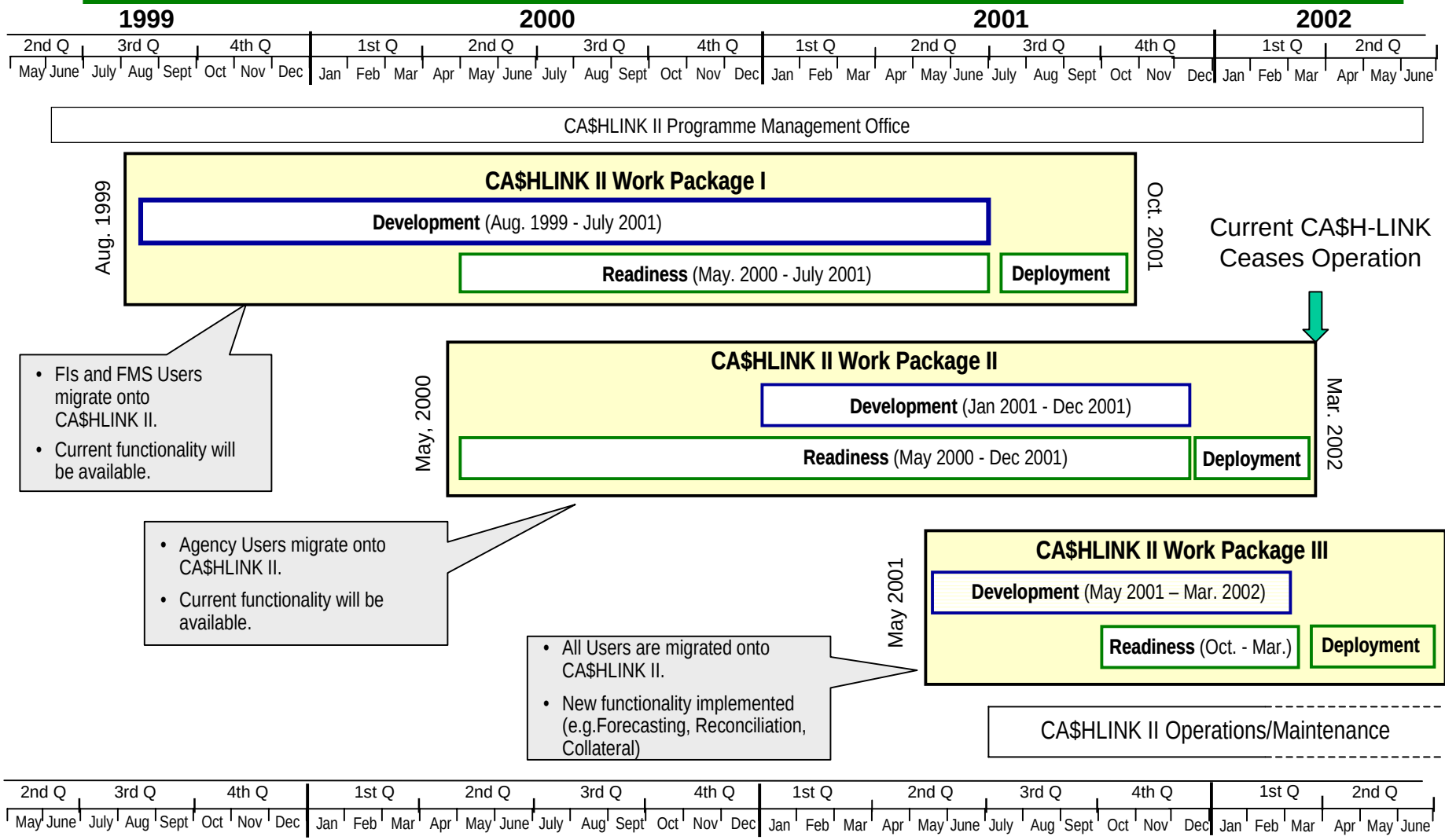
- **We need your active participation and feedback throughout the lifecycle of the new CA$HLINK II System**
  - FI Forums
  - Focus Groups
  - Advisory Group
  - Evaluations
  - Web Site

Ensure Financial Institution Participation and Input

CA$HLINK II

Master Plan

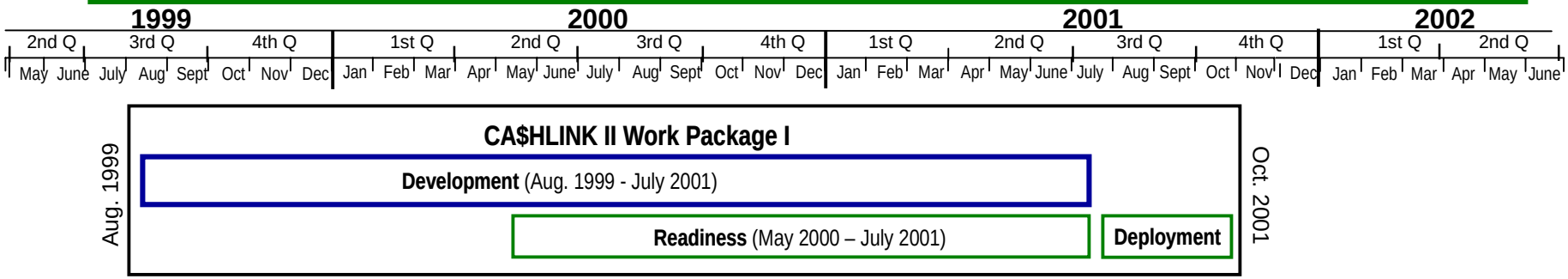
(Timeline Valid as of May 1, 2000)



CA$HLINK II

Work Package I Schedule

(Timeline Valid as of May 1, 2000)

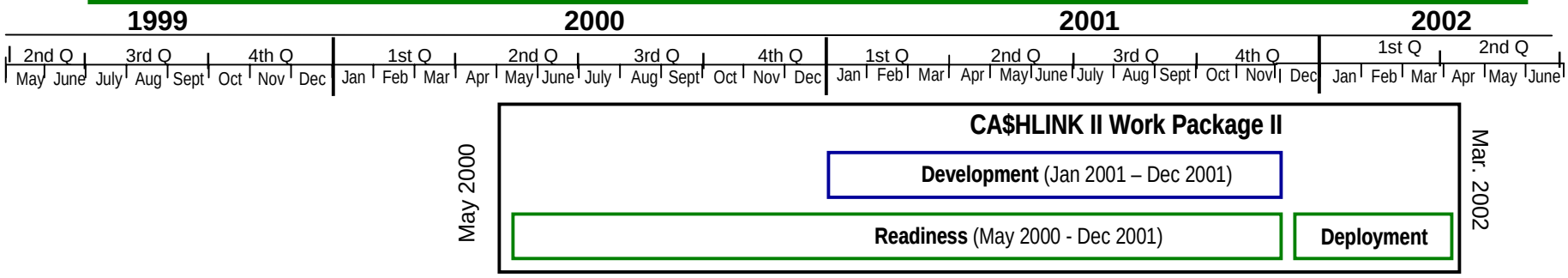


- Work Package I began August 1999 and ends October 2001
- Work Package I addresses FI, FRB and FMS User requirements
- Work Package I functionality includes:
  - Access through the Internet
  - Deposit Reporting
  - Bank Management
  - International Restorations
  - Maintenance
  - Outputs & Inquiries
  - Security & Administration

CA$HLINK II

Work Package II Schedule

(Timeline Valid as of May 1, 2000)

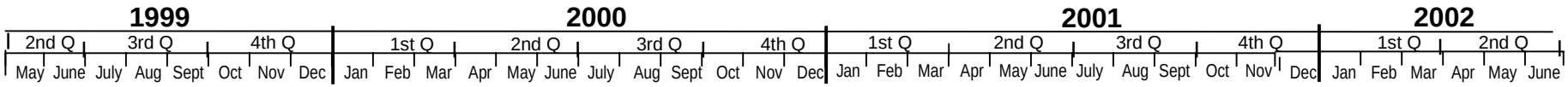


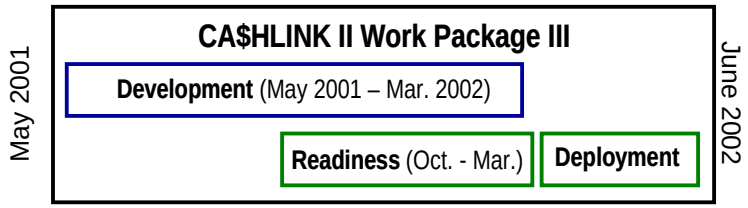
- Work Package II began May 2000 and ends March 2002
- Work Package II addresses Agency User requirements
- Work Package II functionality includes:
  - Access through the Internet
  - Access to the CA$HLINK II Data Warehouse
  - Maintenance of CA$HLINK Community Contacts
  - Outputs & Inquiries
  - Security & Administration

CA$HLINK II

Work Package III Schedule

(Timeline Valid as of May 1, 2000)





- Work Package III begins May 2001 and ends June 2002
- Work Package III addresses all new User requirements
- Work Package III includes:

New Functionality

- Reconciliation
- Forecasting
- Collateral

Enhanced Functionality

- Deposit Reporting (Classification Data)
- Bank Management (Agency Verification)
- Maintenance
- Outputs & Inquiries
- Security & Administration

Changes in The New System

- **Simplified Access**
- **Deposit Reporting**
- **Reconciliation**
- **Bank Management**
- **Maintaining Financial Institution Information**
- **Collateral**

Simplified Access

- **Using State-of-Art Technologies**
  - Ease of Use
  - Windows-based Environment
  - Internet-based Technology
- **On-line Help and Tutorial**
  - User Manual
  - Computer Based Training
  - Frequently Asked Questions
- **Increased Communications**
  - E-mail
  - On-Line Notification

Deposit Reporting

- **Deposit Reporting by Electronic Methods**
  - TTR “Touch Tone Report” Input Not Available in CA$HLINK II
- **Non-Treasury Disbursing Officer (NTDO) Reports**
- **Report Previous Days Closing DDA Balance**
- **Remittance Detail**
- **Capture Fund Account Level Information**
- **Capture CASH TRACK Codes**
- **Debit Reserve Accounts for Outstanding Funds**
- **On-line Notifications and Messaging**

Reconciliation

- **Enhanced Reconciliation Tools for Agencies**
  - On-Line Viewing with More Drill Down Capability
  - Downloading Capabilities for Flexible Off-Line Reconciliation
  - Uploading Capabilities for On-Line Reconciliation
- **Benefit to Financial Institutions:**
  - More Timely Federal Agency Reconciliation to Reduce Differences at Month End

- **FI Reporting by Electronic Methods**
  - Via Web Browser
  - Via Electronic Data Interchange (EDI)
- **Adoption of Industry Standards**
- **Ancillary Billing / IPAC Interface**
- **Agency Verification of Volumes Reported by Financial Institutions**
  - Number of Checks in Deposit
  - Internal Control
- **Bank Report Card**
  - Agency Satisfaction with Service Levels
- **Treasury Time Balance (TTB) Changes Through Treasury Investment Program (TIP)**

Maintaining Financial Institution Information

- **Financial Institution Information**
  - Contact Name and Address
  - Phone Number
  - E-mail Address (CA$HLINK II Internal and External)
- **Account Contact Information**
  - FI Contact per Account
  - Agency Contacts for Financial Institutions
- **Financial Institution Responsibility**
  - Accuracy
  - Updates

Collateral

- **Average Daily Collected Balance to be Sent to Treasury Investment Program (TIP) for Collateral Management**
- **Average Daily Collected Balance Reported Once Each Month by Non-Treasury Disbursing Office (NTDO) Financial Institutions to be Sent to TIP for Collateral Management**
- **TIP will Monitor Circular 176 Collateral**

Readiness

- **Readiness – The group of activities that ensures the entire CA$HLINK Community is prepared for deployment**
  - Communications
  - Training
  - Customer Relationship Management
  - Conversion
  - User Environment Preparation

Be Prepared!

- **Communications**
  - Financial Institution Forums
  - Advisory Group
  - Focus Groups
  - Web Site – http://www.fms.treas.gov/cashlink
  - Newsletters
  - E-Mail – cash.link@fms.treas.gov

Your Participation is Key!

- **CA$HLINK Training**
  - Train-the-Trainer Sessions for FMS
    - Regional Representation
  - CA$HLINK II Training Program
    - Classroom Training provided by FMS
  - Computer-Based Training
    - Interactive self-paced tutorial
    - CD / On-line
  - User Training Manuals
    - Printed document with on-line updates

Training to Meet Your Needs!

- **Customer Relationship Management (CRM)**
  - Updated quality standards and procedures
  - CRM training
  - Call Management System
  - Technical Support Staff
  - Extended hours of operation

Ready to Support!

- **Conversion**
  - Historic data will be available in CA$HLINK II
  - Access to all information from one source during transition periods for Agencies and Financial Institutions

A Seamless Transition!

- **Utilizes the Public Internet**
  - Connect directly from your FI's Internet Service Provider (ISP) to CA$HLINK II
  - Connect to your FI's ISP via a Local Area Network (LAN)
- **Small-Client**
  - Standard Window Look / Feel
  - Some CA$HLINK II developed software stored on your PC
- **User Environment Preparation**
  - Prepare required workstation(s)
  - Identify and resolve any issues related to security and access
  - Ensure that workstation(s) can connect to CASHLINK II

A Prime Readiness Responsibility!

- **The client PC will have a minimum of the following Hardware:**
  - IBM-compatible
  - 233MHZ Processor
  - 200MB on hard drive for Client Application and Data
  - 64MB RAM
  - CD-ROM Drive
  - LAN access if using the Dedicated Link
- **The client PC will have a minimum of the following Software:**
  - Windows 95/98 or NT 4.0
  - Web Browser Internet Explorer 4.01 or Netscape 4.5
  - CA$HLINK II Java Client Application (loaded from CD)
  - Adobe PDF viewer 3.01 or greater
  - TCP/IP protocol stack
- **Backup or Optional Access via Dialup link**
  - 56KB Modem recommended for enhanced performance

Architecture Validation Activities

Purpose of Architecture Validation Activities

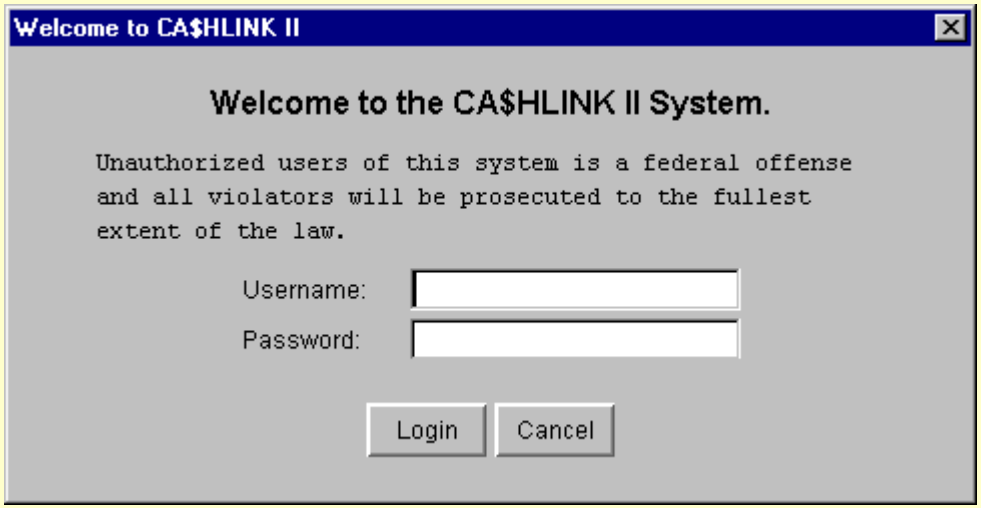
- **Look / Feel Prototype**
  - Early usability testing
    - Screen navigation
    - Data entry
    - Data retrieval
- **Business Security Risk Evaluation**
  - Determine the security requirements
    - Public Internet
    - External
    - Internal
- **Performance Benchmark**
  - Internet performance impact on the CA$HLINK II applications
    - Small-Client
    - Thin-Client

Look / Feel Prototype

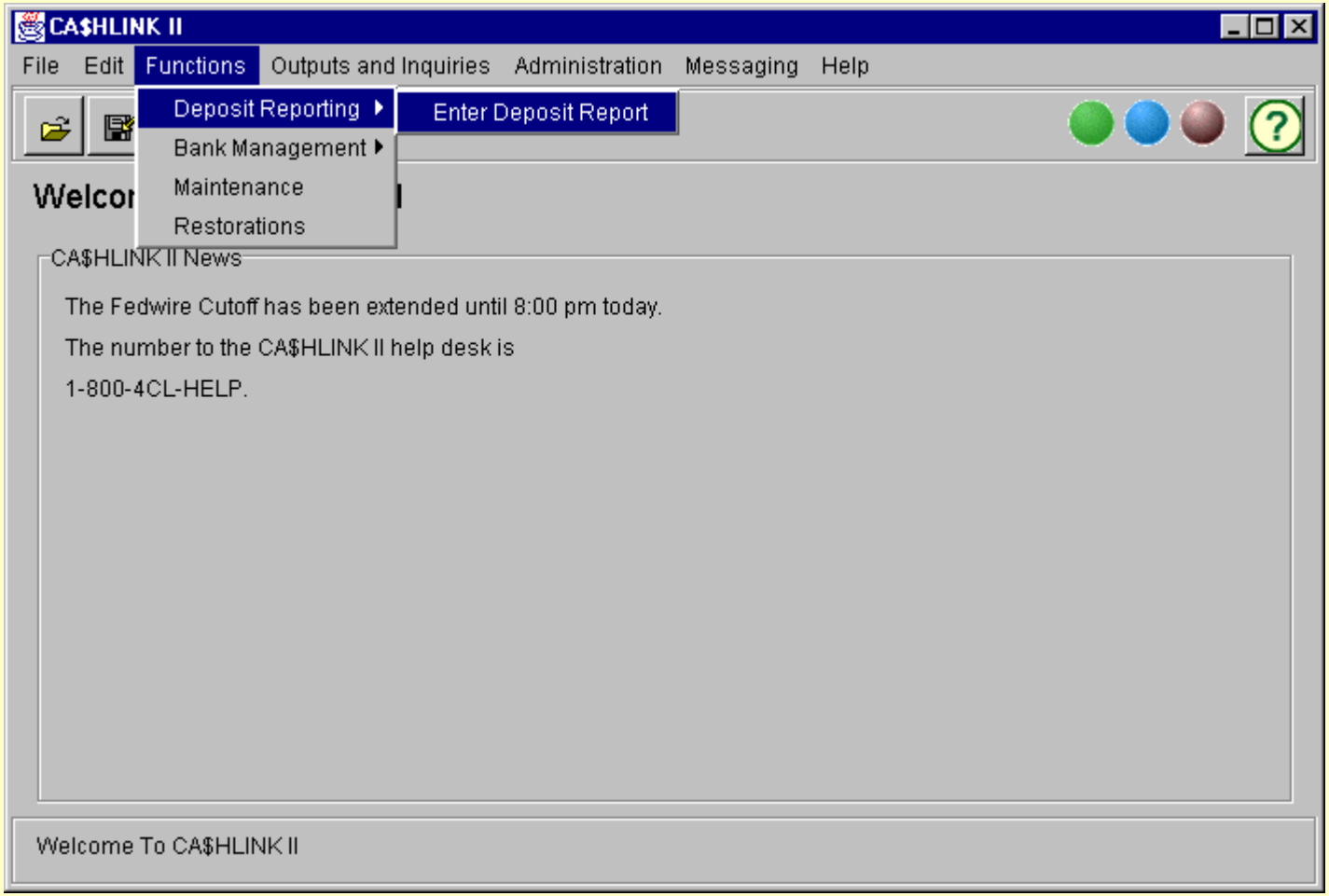
Look / Feel Prototype

- **Vehicle for early CA$HLINK Community feedback on:**
  - Menu navigation
  - Messaging
  - Data Input
  - Query selection
  - Query setup
  - Response to Query
- **This is not intended to show real functionality**

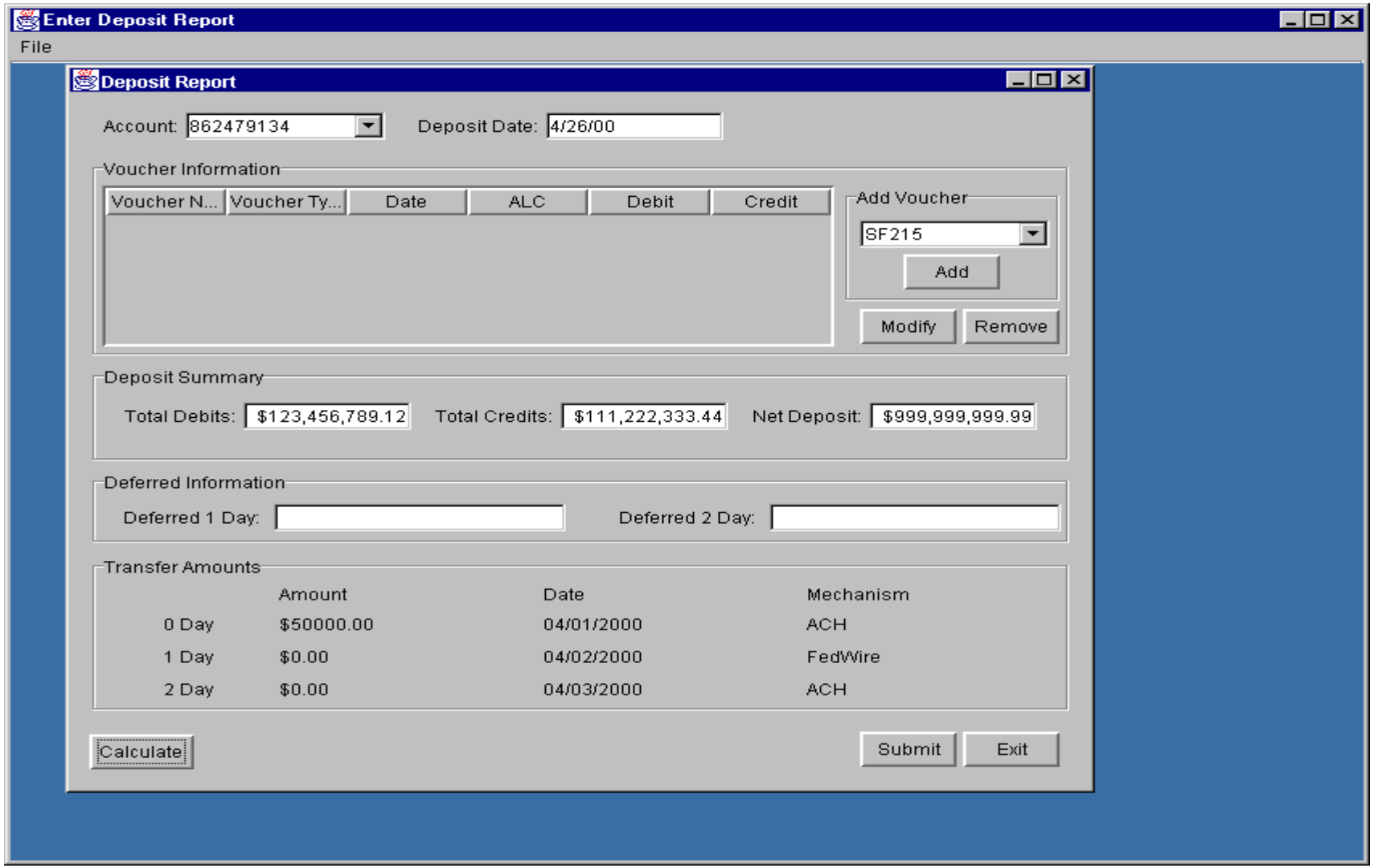
Logon


Welcome to CA$HLINK II
Welcome to the CA$HLINK II System.
Unauthorized users of this system is a federal offense and all violators will be prosecuted to the fullest extent of the law.
Username:
Password:
Login
Cancel

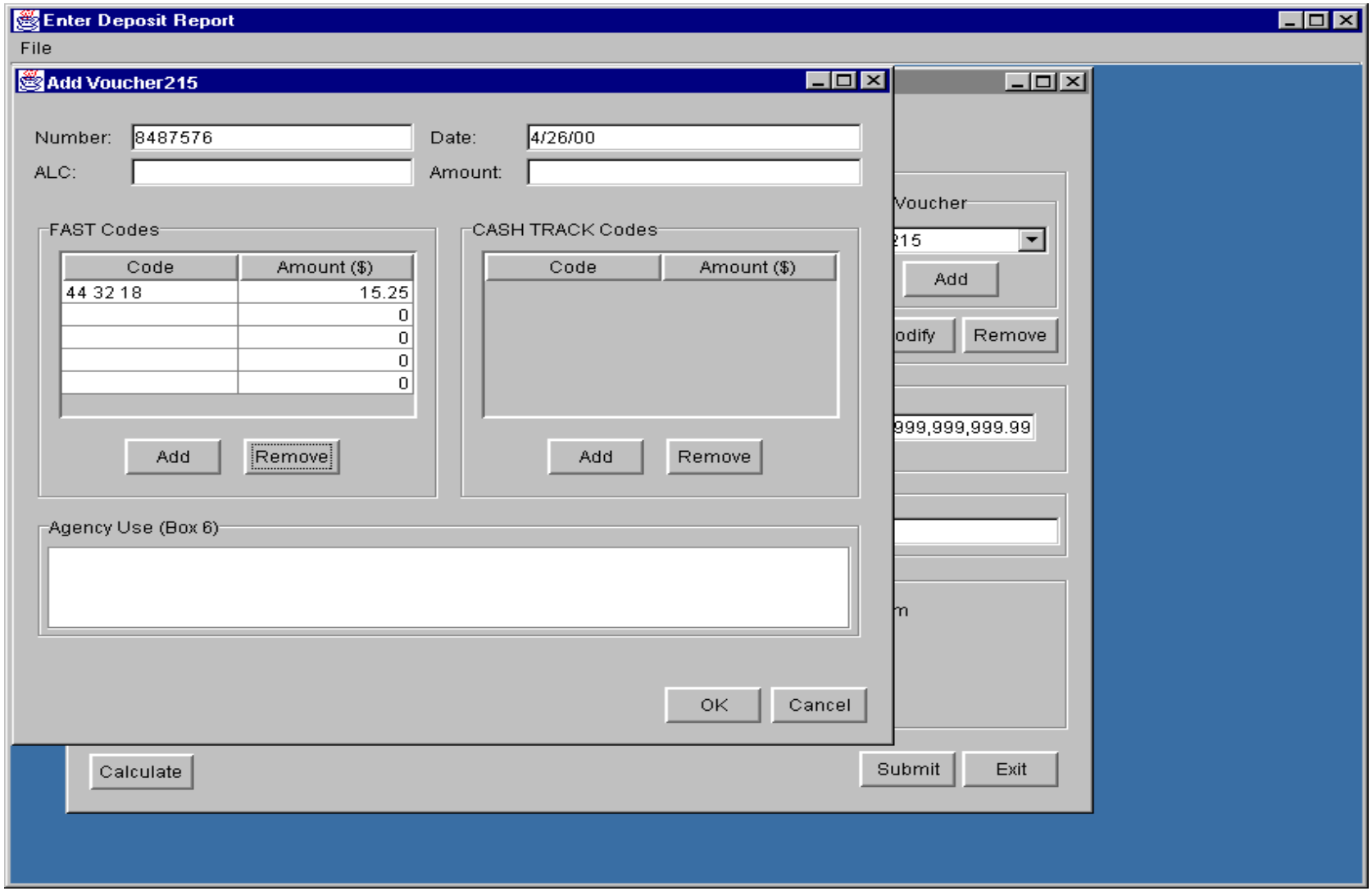
Main Menu


CA$HLINK II
File
Edit
Functions
Outputs and Inquiries
Administration
Messaging
Help
Deposit Reporting
Bank Management
Maintenance
Restorations
Enter Deposit Report
Welcor
CA$HLINK II News
The Fedwire Cutoff has been extended until 8:00 pm today.
The number to the CA$HLINK II help desk is
1-800-4CL-HELP.
Welcome To CA$HLINK II

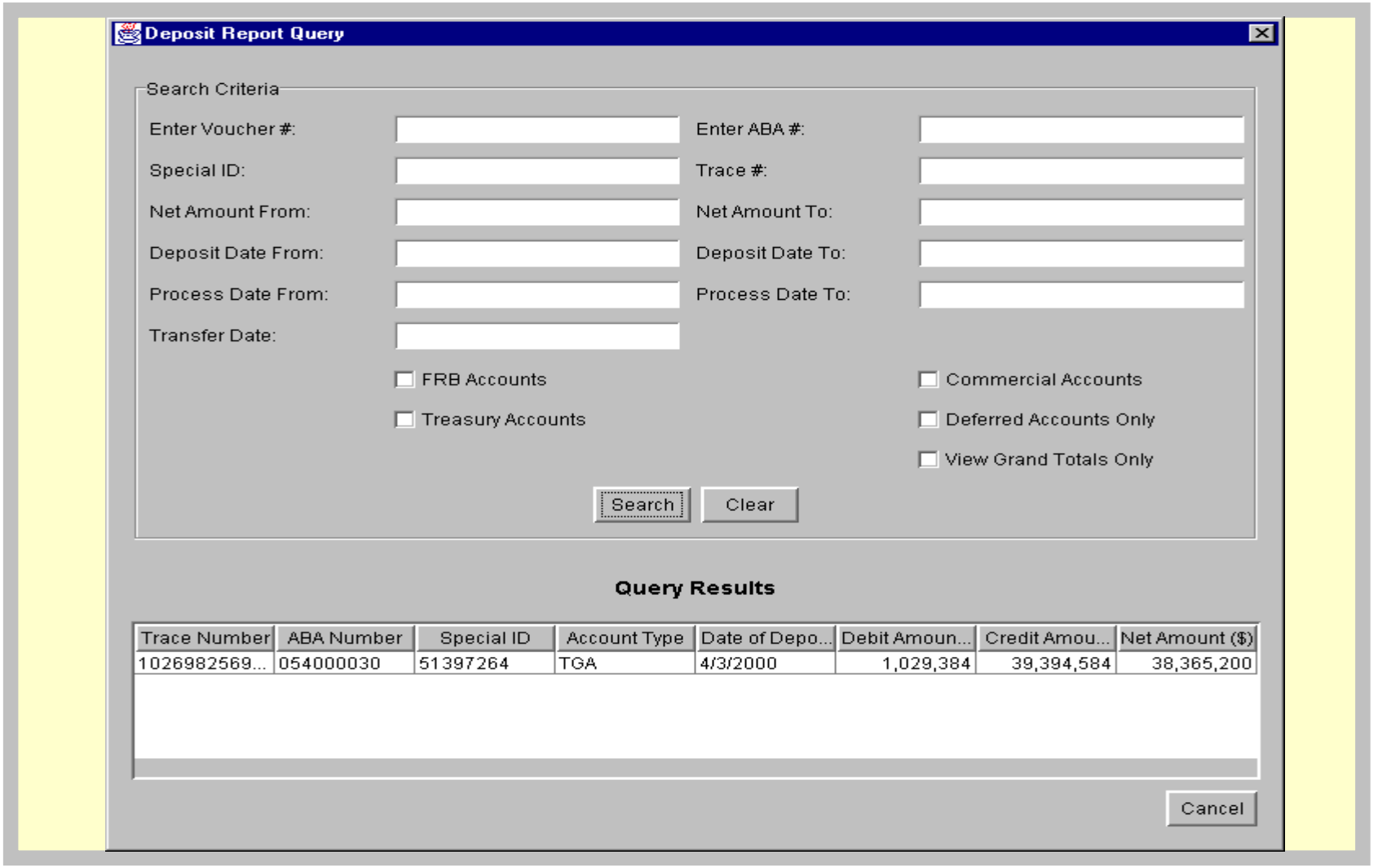
Deposit Reporting



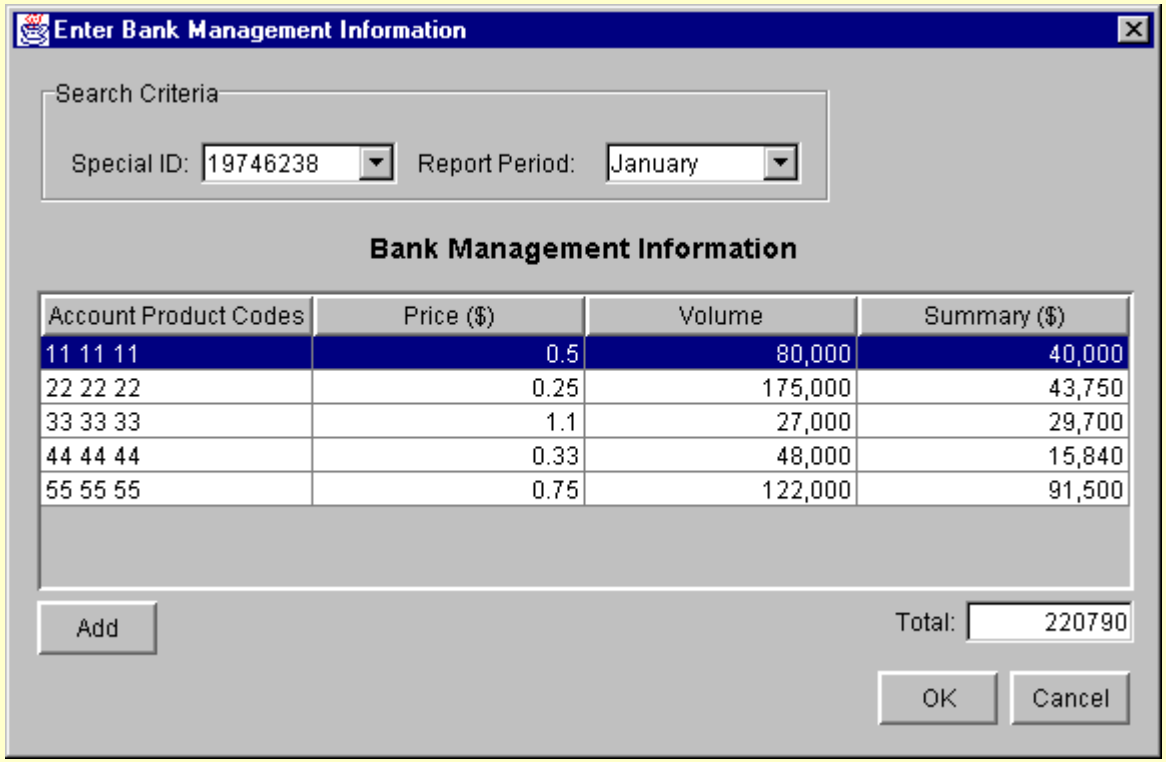
Deposit Reporting



Deposit Reporting



Bank Management



Business Security Risk Evaluation

Business Security Risk Evaluation

- **Business Security Risk Evaluation**
  - Business Security Risk Objective
  - Magnitude of the Internet Threat
  - Business Risk / Vulnerability
  - Business Risk Mitigation Strategies
  - Benefits

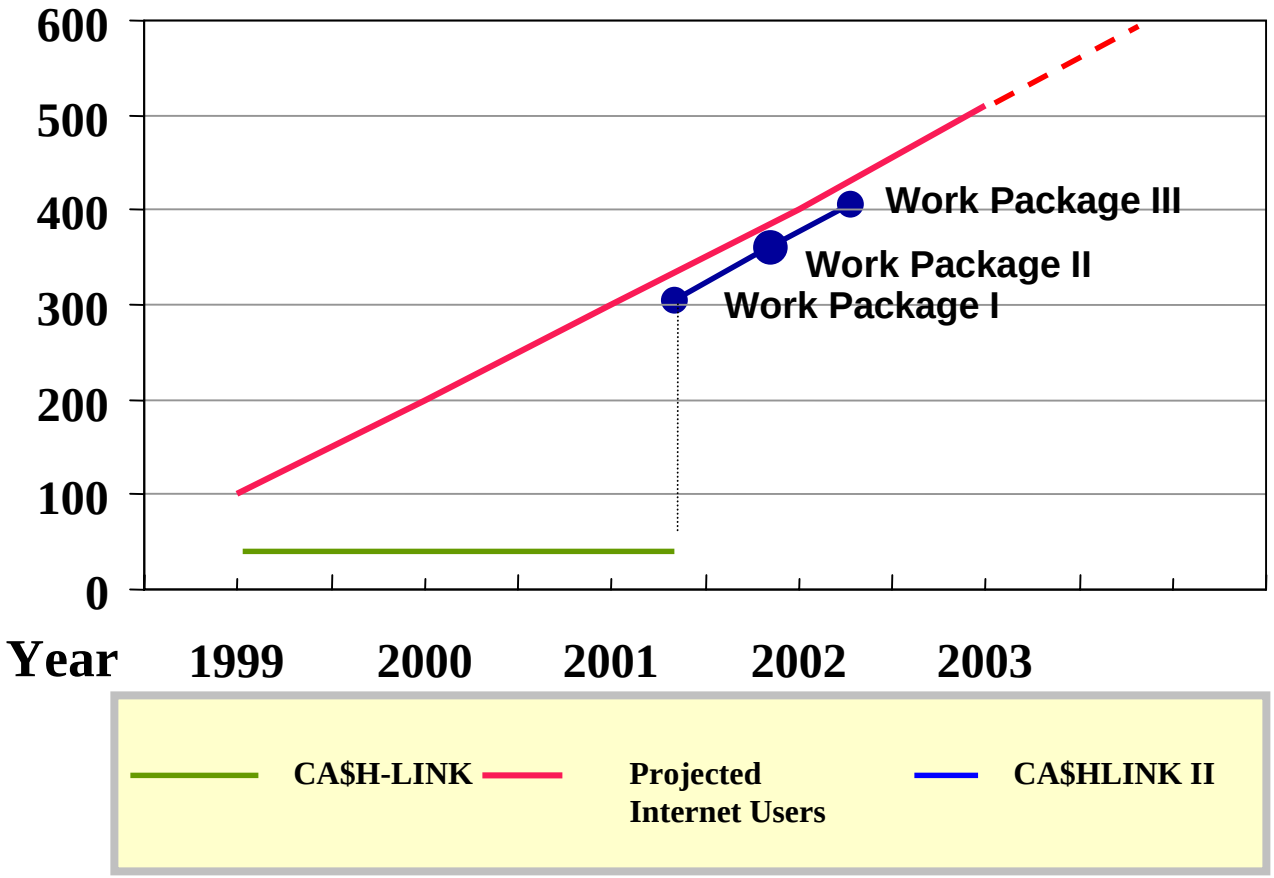
Business Security Risk Objective

- **Identify the threats to the CA$HLINK Community by user role from the:**
  - Internet, other external sources or internal sources
- **Identify the business risk and vulnerability of each user role by type of threats from the:**
  - Internet, other external sources or internal sources
- **Determine prudent security risk mitigation strategies that are necessary to protect each user role:**
  - The Policy and Procedure requirements
  - The CA$HLINK II Architectural requirements:
    - Prevention
    - Monitoring
    - Counter-Measures

CA$HLINK II

Magnitude of the Internet Threat

Projected Number of Public Internet Users (millions)



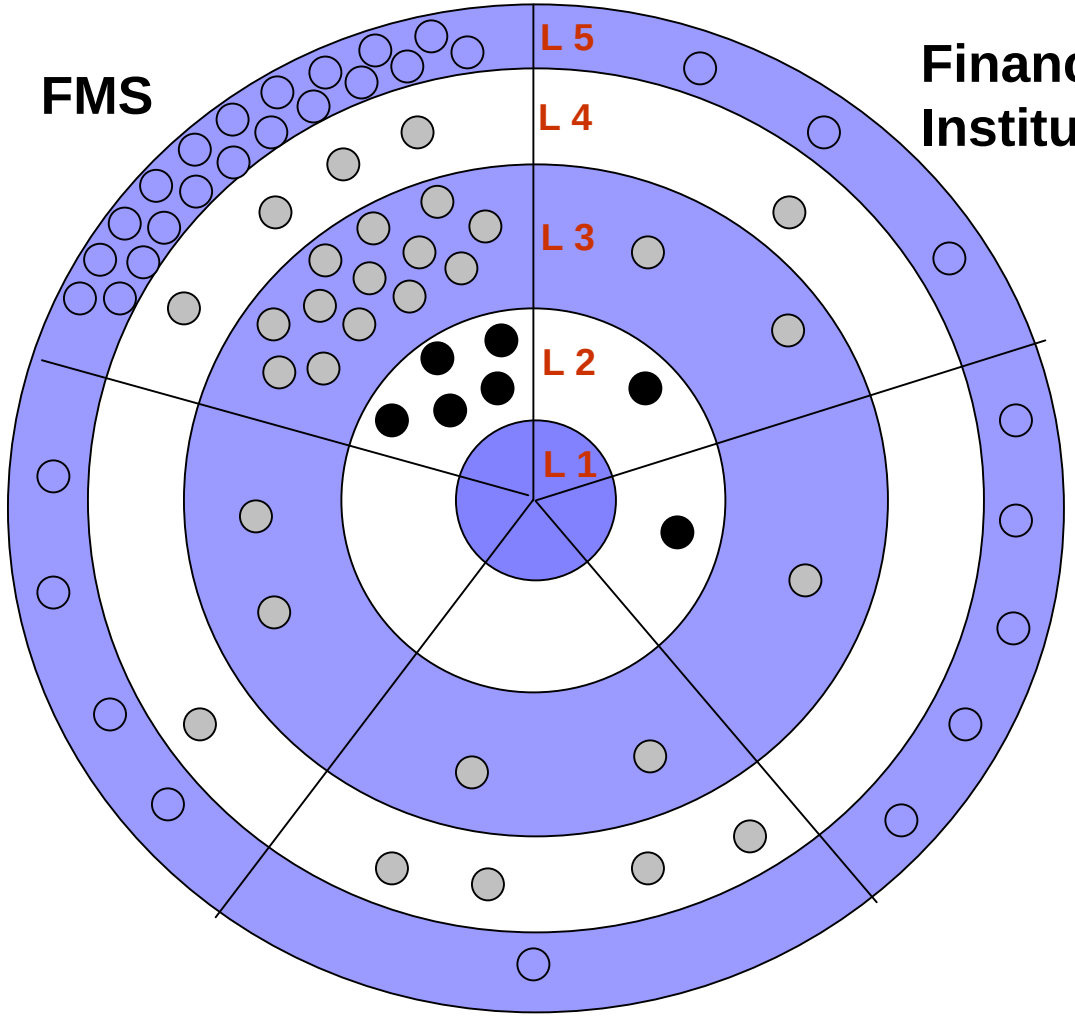
Source: Statistics from Carnegie Mellon University, Computer Almanac, published in Newsweek, "The New Wired World", September 20, 1999

Internet Threats

	Denial of Service (e.g. Bogus requests, sync, "Zombie")	Malicious Code (e.g. Trojan Horse, Virus, Worms)	Impersonation (e.g. Counterfeit email, Applets, Scripts)	Espionage Techniques (e.g. Network scanners, Sniffers, Password crackers, Tools, Utilities)
Fraud		X	X	X
Theft		X	X	X
Vandalism	X	X	X	X
Disruption	X			X
Terrorism	X			X

CA$HLINK II

Business Risk / Vulnerability



FMS

Financial Institutions

Federal Reserve Bank

CA$HLINK Operations Riggs Bank

Agencies

- **L1 – Catastrophic**
- **L2 – Extreme**
- **L3 – Moderate**
- **L4 – Minimal**
- **L5 – None**

Risk Mitigation Strategies

	Level 2	Level 3	Level 4	Level 5
System				
Prevention	2X	X	X	
Detection	X			
Counter - Measures	X			
People / Processes				
Policies	2X	X	X	X
Procedures	2X	X	X	X
Clearances	X			

Business Security Risk Evaluation Benefits

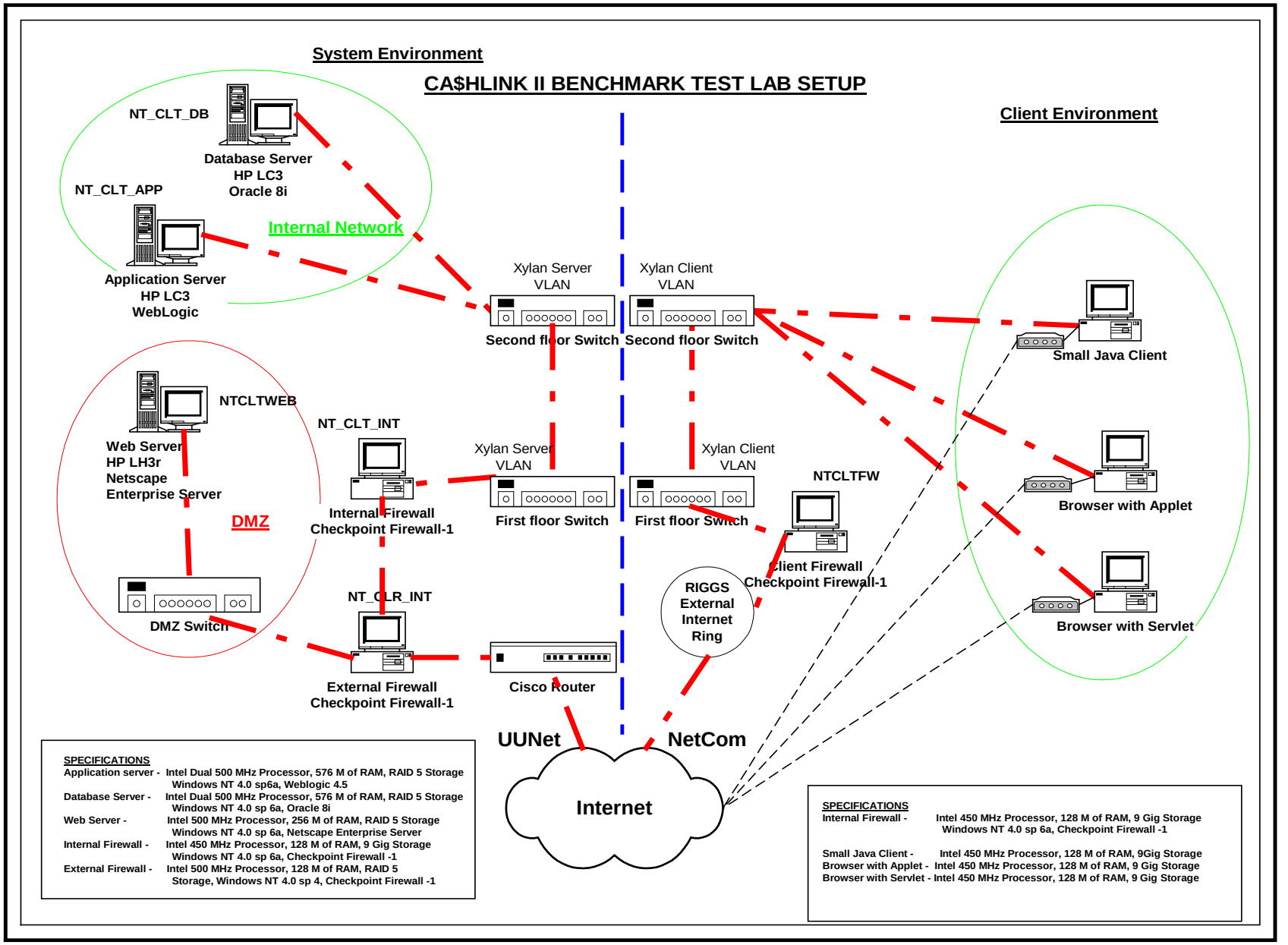
- **Effective Security Model**
  - Architecture
    - Prevention, Detection, Counter-measures
  - People and processes
    - Policies, Procedures, Clearances
- **Cost-effective Security Implementation**
  - Provide only what is needed for prudent risk mitigation based on business community risk and vulnerability

Performance Benchmark

- **Performance Benchmark**
  - Performance Benchmark Hypothesis
  - Test Lab Setup
  - Performance Benchmark Results

Performance Benchmark Hypothesis

- **Provide tests to determine the Internet's effect on performance for:**
  - Small-Client Java Application (LAN connected and Dial-up)
  - Thin-Client Web Browser with Java Applet (LAN connected and Dial-up)
  - Thin-Client Web Browser with HTML and Java Servlet (LAN connected and Dial-up)
- **Provide user / system interactions for the testing for:**
  - Menu navigation
  - System sign-on
  - Messaging
  - Data input
  - Query selection
  - Query setup
- **Provide tests to determine the performance effect of double-hop security configuration**


System Environment
CA$HLINK II BENCHMARK TEST LAB SETUP
Client Environment
NT_CLT_DB
Database Server
HP LC3
Oracle 8i
NT_CLT_APP
Internal Network
Application Server
HP LC3
WebLogic
Xylan Server VLAN
Xylan Client VLAN
Second floor Switch
Second floor Switch
Small Java Client
NTCLTWEB
Web Server
HP LH3r
Netscape
Enterprise Server
NT_CLT_INT
Internal Firewall
Checkpoint Firewall-1
Xylan Server VLAN
Xylan Client VLAN
First floor Switch
First floor Switch
NTCLTFW
Browser with Applet
DMZ
DMZ Switch
NT_CLR_INT
External Firewall
Checkpoint Firewall-1
Cisco Router
RIGGS
External
Internet
Ring
Client Firewall
Checkpoint Firewall-1
Browser with Servlet
UUNet
NetCom
Internet
SPECIFICATIONS
Application server - Intel Dual 500 MHz Processor, 576 M of RAM, RAID 5 Storage
Windows NT 4.0 sp6a, Weblogic 4.5
Database Server - Intel Dual 500 MHz Processor, 576 M of RAM, RAID 5 Storage
Windows NT 4.0 sp 6a, Oracle 8i
Web Server - Intel 500 MHz Processor, 256 M of RAM, RAID 5 Storage
Windows NT 4.0 sp 6a, Netscape Enterprise Server
Internal Firewall - Intel 450 MHz Processor, 128 M of RAM, 9 Gig Storage
Windows NT 4.0 sp 6a, Checkpoint Firewall -1
External Firewall - Intel 500 MHz Processor, 128 M of RAM, RAID 5
Storage, Windows NT 4.0 sp 4, Checkpoint Firewall -1
SPECIFICATIONS
Internal Firewall - Intel 450 MHz Processor, 128 M of RAM, 9 Gig Storage
Windows NT 4.0 sp 6a, Checkpoint Firewall -1
Small Java Client - Intel 450 MHz Processor, 128 M of RAM, 9Gig Storage
Browser with Applet - Intel 450 MHz Processor, 128 M of RAM, 9 Gig Storage
Browser with Servlet - Intel 450 MHz Processor, 128 M of RAM, 9 Gig Storage

Performance Benchmark Results

- The Internet delay was minimal during CA$HLINK II Performance Benchmark
- User session startup and firewall authentication had a one-time hit on performance
- Dial-up Clients (Application and Applet) performed reasonably well for the selected functionality
- The bulk of the CA$HLINK II System response time challenges were not Internet related

Communications

- **CA$HLINK II Website**
  - http://www.fms.treas.gov/cashlink
    - Subscribe to our email notification service
  - E-mail questions / comments to cash.link@fms.treas.gov
- **CA$HLINK Newsletter (http://www.fms.treas.gov/cashlink/agency-access/)**
  - Update of Progress
  - Frequently Asked Questions
- **Customer User Groups (Federal Agencies, Financial Institutions, FMS Users)**
  - Conference Calls
  - Focus Group Sessions
  - Questionnaires

The Road Ahead - What's Next for You?

We Want and Need Your Active Participation during Development, Readiness and Deployment!

- **Provide feedback on the CA$HLINK II System and the Look / Feel Prototype on the Feedback Form**
- **Submit additional comments and questions On-line**
- **Encourage others to view this Presentation and the Comments at our Website**
- **Future Focus Groups**
  - Bank Management (Tentative November 2000)
- **Readiness Activities (Advisory Group)**
  - If interested, please fill out Participation Form
    - Participate in Training Content Development, Acceptance Testing and Pilot

Contacts

- **CA$HLINK II Questions**
  - Bill Paton, FMS CA$HLINK II Team
    - E-mail: william.paton@fms.treas.gov
    - Phone: 202-874-6599
- **CA$H-LINK Questions**
  - Riggs CA$HLINK Help Desk
    - E-mail: cashlinkaa@riggsbank.com
    - Phone: 1-800-346-5465 or 301-887-6600

www.fms.treas.gov/cashlink